



# Attachment C EMISSIONS INVENTORY REPORT

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# EDMS 4.04 Emissions Inventory Report

Study Name: Chino - Existing Condition

Airport: CHINO

Report Date: 12/27/02

## SUMMARY

(Tons/Year)

NAME	CO	HC	NOx	SOx	PM10
Aircraft	2,356.159	42.518	7.160	.738	.000
GSE/AGE/APU	88.296	1.805	4.905	.191	.148
Roadways	53.914	7.242	7.435	.364	.338
Parking Lots	3.985	.483	.150	.005	.005
Stationary Sources	.000	1.777	.000	.000	.000
Total	2,502.354	53.825	19.650	1.298	.491

# AIRCRAFT EMISSIONS

(Tons/Year)

Aircraft	Engine	Mode	CO	HC	NOx	SOx	PM10
500 Citation	JT15D-1A & 1B	TAXI	4.314	1.650	.057	.018	.000
500 Citation	JT15D-1A & 1B	TKOF	.052	.000	.150	.011	.000
500 Citation	JT15D-1A & 1B	CLMB	.068	.000	.132	.010	.000
500 Citation	JT15D-1A & 1B	APCH	1.329	.145	.113	.018	.000
500 Citation	JT15D-1A & 1B	TGO	.096	.012	.025	.002	.000
500 Citation	JT15D-1A & 1B	APU	.000	.000	.000	.000	.000
500 Citation	JT15D-1A & 1B	GSE	15.782	.316	.771	.028	.024
Aztec	TIO-540-J2B2	TAXI	28.265	1.487	.009	.002	.000
Aztec	TIO-540-J2B2	TKOF	27.847	.239	.007	.002	.000
Aztec	TIO-540-J2B2	CLMB	44.820	.507	.007	.003	.000
Aztec	TIO-540-J2B2	APCH	54.201	.001	.060	.005	.000
Aztec	TIO-540-J2B2	TGO	82.157	.507	.048	.007	.000
Aztec	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Aztec	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Cessna 150	O-200	TAXI	14.748	.664	.036	.002	.000
Cessna 150	O-200	TKOF	21.007	.451	.106	.002	.000
Cessna 150	O-200	CLMB	46.516	.999	.234	.005	.000
Cessna 150	O-200	APCH	77.956	2.180	.075	.007	.000
Cessna 150	O-200	TGO	122.002	3.047	.347	.012	.000
Cessna 150	O-200	APU	.000	.000	.000	.000	.000
Cessna 150	O-200	GSE	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	TAXI	3.063	.168	.004	.000	.000
Cessna T337	IO-360-B	TKOF	4.602	.038	.008	.000	.000
Cessna T337	IO-360-B	CLMB	5.226	.043	.024	.001	.000
Cessna T337	IO-360-B	APCH	5.465	.077	.080	.001	.000
Cessna T337	IO-360-B	TGO	9.897	.105	.072	.001	.000
Cessna T337	IO-360-B	APU	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	GSE	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	TAXI	126.078	6.635	.038	.011	.000
Cherokee six	TIO-540-J2B2	TKOF	146.604	1.257	.037	.011	.000

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Cherokee six	TIO-540-J2B2	CLMB	214.195	2.422	.035	.016	.000
Cherokee six	TIO-540-J2B2	APCH	385.075	.004	.424	.034	.000
Cherokee six	TIO-540-J2B2	TGO	625.740	3.134	.416	.051	.000
Cherokee six	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Gulfstream IV	DEFAULT	APCH	.245	.057	.358	.063	.000
Gulfstream IV	DEFAULT	TAXI	2.028	.286	.210	.084	.000
Gulfstream IV	DEFAULT	CLMB	.026	.010	.539	.032	.000
Gulfstream IV	DEFAULT	TKOF	.031	.036	.936	.044	.000
Gulfstream IV	DEFAULT	TGO	.020	.006	.104	.008	.000
Gulfstream IV	DEFAULT	APU	.056	.004	.274	.027	.000
Gulfstream IV	DEFAULT	GSE	.146	.039	.324	.007	.016
Kingair 200	PT6A-41	TAXI	5.179	4.565	.088	.024	.000
Kingair 200	PT6A-41	TKOF	.058	.020	.091	.006	.000
Kingair 200	PT6A-41	CLMB	.102	.032	.119	.009	.000
Kingair 200	PT6A-41	APCH	2.335	1.524	.312	.036	.000
Kingair 200	PT6A-41	TGO	.225	.143	.046	.005	.000
Kingair 200	PT6A-41	APU	.000	.000	.000	.000	.000
Kingair 200	PT6A-41	GSE	27.407	.548	1.340	.049	.041
Learjet 25C	DEFAULT	TKOF	.130	.000	.020	.003	.000
Learjet 25C	DEFAULT	CLMB	.092	.001	.012	.002	.000
Learjet 25C	DEFAULT	TAXI	1.893	.220	.011	.007	.000
Learjet 25C	DEFAULT	APCH	.789	.000	.013	.005	.000
Learjet 25C	DEFAULT	TGO	1.180	.005	.051	.011	.000
Learjet 25C	DEFAULT	APU	.000	.000	.000	.000	.000
Learjet 25C	DEFAULT	GSE	2.138	.043	.105	.004	.003
Learjet 35/36	DEFAULT	CLMB	.029	.002	.186	.008	.000
Learjet 35/36	DEFAULT	APCH	.749	.142	.197	.018	.000
Learjet 35/36	DEFAULT	TAXI	1.928	.659	.093	.018	.000
Learjet 35/36	DEFAULT	TKOF	.028	.002	.308	.011	.000
Learjet 35/36	DEFAULT	TGO	.053	.010	.044	.002	.000
Learjet 35/36	DEFAULT	APU	.000	.000	.000	.000	.000
Learjet 35/36	DEFAULT	GSE	15.360	.307	.751	.027	.023
Navajo	TIO-540-J2B2	TAXI	28.265	1.487	.009	.002	.000
Navajo	TIO-540-J2B2	TKOF	27.847	.239	.007	.002	.000
Navajo	TIO-540-J2B2	CLMB	44.820	.507	.007	.003	.000
Navajo	TIO-540-J2B2	APCH	54.201	.001	.060	.005	.000
Navajo	TIO-540-J2B2	TGO	82.157	.507	.048	.007	.000

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Navajo	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Navajo	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	TAXI	5.200	4.583	.089	.024	.000
PA-42 Cheyenne	PT6A-41	TKOF	.065	.022	.101	.007	.000
PA-42 Cheyenne	PT6A-41	CLMB	.075	.023	.088	.006	.000
PA-42 Cheyenne	PT6A-41	APCH	1.566	1.022	.209	.024	.000
PA-42 Cheyenne	PT6A-41	TGO	.157	.100	.035	.003	.000
PA-42 Cheyenne	PT6A-41	APU	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	GSE	27.407	.548	1.340	.049	.041
Robinson R22	IO-320-DIAD	TAXI	.674	.039	.001	.001	.000
Robinson R22	IO-320-DIAD	TKOF	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	CLMB	6.901	.074	.044	.004	.000
Robinson R22	IO-320-DIAD	APCH	4.478	.058	.016	.003	.000
Robinson R22	IO-320-DIAD	TGO	31.310	.364	.164	.019	.000
Robinson R22	IO-320-DIAD	APU	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	GSE	.000	.000	.000	.000	.000

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\*\* Denotes User Created Aircraft

## VEHICULAR EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Kimball Avenue	20.218	2.716	2.788	.136	.127
Merrill Avenue	33.696	4.526	4.647	.227	.211
Airport total	3.985	.483	.150	.005	.005

## STATIONARY SOURCE EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Airport Jet-A	.000	.023	.000	.000	.000
Airport LL	.000	1.754	.000	.000	.000



# EDMS 4.04 Emissions Inventory Report

Study Name: Chino - Future - no improvements

Airport: CHINO

Report Date: 12/27/02

## SUMMARY

(Tons/Year)

NAME	CO	HC	NOx	SOx	PM10
Aircraft	3,420.065	70.613	13.773	1.410	.000
GSE/AGE/APU	173.328	3.553	9.756	.383	.293
Roadways	316.747	42.548	43.683	2.137	1.986
Parking Lots	5.524	.669	.207	.007	.007
Stationary Sources	.000	2.311	.000	.000	.000
Total	3,915.664	119.694	67.419	3.937	2.286

\* Report includes 1 Aircraft and 0 GSE created by the user.



# AIRCRAFT EMISSIONS

(Tons/Year)

Aircraft	Engine	Mode	CO	HC	NOx	SOx	PM10
**B737-300	DEFAULT	APCH	.082	.002	.230	.014	.000
**B737-300	DEFAULT	CLMB	.032	.000	.002	.000	.000
**B737-300	DEFAULT	TKOF	.008	.000	.192	.005	.000
**B737-300	DEFAULT	TAXI	2.061	.095	.313	.041	.000
**B737-300	DEFAULT	APU	.000	.000	.000	.000	.000
**B737-300	DEFAULT	GSE	.000	.000	.000	.000	.000
500 Citation	JT15D-1A & 1B	TAXI	9.398	3.595	.125	.038	.000
500 Citation	JT15D-1A & 1B	TKOF	.114	.000	.326	.023	.000
500 Citation	JT15D-1A & 1B	CLMB	.148	.000	.286	.023	.000
500 Citation	JT15D-1A & 1B	APCH	2.894	.317	.246	.039	.000
500 Citation	JT15D-1A & 1B	TGO	.107	.013	.027	.003	.000
500 Citation	JT15D-1A & 1B	APU	.000	.000	.000	.000	.000
500 Citation	JT15D-1A & 1B	GSE	34.379	.688	1.680	.061	.051
Aztec	TIO-540-J2B2	TAXI	45.581	2.399	.014	.004	.000
Aztec	TIO-540-J2B2	TKOF	44.907	.385	.011	.003	.000
Aztec	TIO-540-J2B2	CLMB	72.278	.817	.012	.005	.000
Aztec	TIO-540-J2B2	APCH	87.407	.001	.096	.008	.000
Aztec	TIO-540-J2B2	TGO	92.007	.568	.053	.007	.000
Aztec	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Aztec	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Cessna 150	O-200	TAXI	24.988	1.125	.061	.004	.000
Cessna 150	O-200	TKOF	35.594	.764	.179	.004	.000
Cessna 150	O-200	CLMB	78.814	1.692	.396	.009	.000
Cessna 150	O-200	APCH	132.085	3.694	.127	.012	.000
Cessna 150	O-200	TGO	136.593	3.411	.389	.014	.000
Cessna 150	O-200	APU	.000	.000	.000	.000	.000
Cessna 150	O-200	GSE	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	TAXI	4.940	.271	.006	.001	.000
Cessna T337	IO-360-B	TKOF	7.422	.062	.012	.001	.000
Cessna T337	IO-360-B	CLMB	8.428	.070	.039	.001	.000

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Cessna T337	IO-360-B	APCH	8.813	.124	.130	.001	.000
Cessna T337	IO-360-B	TGO	11.084	.118	.081	.001	.000
Cessna T337	IO-360-B	APU	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	GSE	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	TAXI	213.622	11.242	.064	.018	.000
Cherokee six	TIO-540-J2B2	TKOF	248.400	2.129	.062	.019	.000
Cherokee six	TIO-540-J2B2	CLMB	362.925	4.103	.059	.027	.000
Cherokee six	TIO-540-J2B2	APCH	652.458	.007	.719	.057	.000
Cherokee six	TIO-540-J2B2	TGO	700.610	3.509	.465	.057	.000
Cherokee six	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Gulfstream IV	DEFAULT	APCH	.534	.123	.781	.137	.000
Gulfstream IV	DEFAULT	TAXI	4.422	.624	.459	.184	.000
Gulfstream IV	DEFAULT	CLMB	.056	.021	1.175	.070	.000
Gulfstream IV	DEFAULT	TKOF	.068	.077	2.042	.097	.000
Gulfstream IV	DEFAULT	TGO	.023	.007	.120	.009	.000
Gulfstream IV	DEFAULT	APU	.121	.009	.597	.059	.000
Gulfstream IV	DEFAULT	GSE	.319	.086	.707	.016	.035
Kingair 200	PT6A-41	TAXI	9.753	8.596	.166	.046	.000
Kingair 200	PT6A-41	TKOF	.110	.038	.172	.012	.000
Kingair 200	PT6A-41	CLMB	.193	.060	.224	.016	.000
Kingair 200	PT6A-41	APCH	4.397	2.869	.587	.068	.000
Kingair 200	PT6A-41	TGO	.253	.161	.052	.005	.000
Kingair 200	PT6A-41	APU	.000	.000	.000	.000	.000
Kingair 200	PT6A-41	GSE	51.606	1.032	2.523	.092	.077
Learjet 25C	DEFAULT	TKOF	.112	.000	.017	.002	.000
Learjet 25C	DEFAULT	CLMB	.080	.001	.010	.002	.000
Learjet 25C	DEFAULT	TAXI	1.640	.190	.010	.006	.000
Learjet 25C	DEFAULT	APCH	.683	.000	.012	.004	.000
Learjet 25C	DEFAULT	TGO	1.327	.006	.058	.012	.000
Learjet 25C	DEFAULT	APU	.000	.000	.000	.000	.000
Learjet 25C	DEFAULT	GSE	1.852	.037	.091	.003	.003
Learjet 35/36	DEFAULT	CLMB	.063	.004	.406	.017	.000
Learjet 35/36	DEFAULT	APCH	1.630	.310	.430	.039	.000
Learjet 35/36	DEFAULT	TAXI	4.198	1.436	.202	.039	.000
Learjet 35/36	DEFAULT	TKOF	.061	.005	.670	.024	.000
Learjet 35/36	DEFAULT	TGO	.059	.011	.049	.003	.000
Learjet 35/36	DEFAULT	APU	.000	.000	.000	.000	.000

*EDMS 4.04 Emissions Inventory*

Learjet 35/36	DEFAULT	GSE	33.445	.669	1.635	.060	.050
Navajo	TIO-540-J2B2	TAXI	45.581	2.399	.014	.004	.000
Navajo	TIO-540-J2B2	TKOF	44.907	.385	.011	.003	.000
Navajo	TIO-540-J2B2	CLMB	72.278	.817	.012	.005	.000
Navajo	TIO-540-J2B2	APCH	87.407	.001	.096	.008	.000
Navajo	TIO-540-J2B2	TGO	92.007	.568	.053	.007	.000
Navajo	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Navajo	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	TAXI	9.791	8.630	.167	.046	.000
PA-42 Cheyenne	PT6A-41	TKOF	.122	.042	.191	.013	.000
PA-42 Cheyenne	PT6A-41	CLMB	.142	.044	.165	.012	.000
PA-42 Cheyenne	PT6A-41	APCH	2.949	1.925	.394	.046	.000
PA-42 Cheyenne	PT6A-41	TGO	.176	.112	.040	.004	.000
PA-42 Cheyenne	PT6A-41	APU	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	GSE	51.606	1.032	2.523	.092	.077
Robinson R22	IO-320-DIAD	TAXI	.905	.053	.002	.001	.000
Robinson R22	IO-320-DIAD	TKOF	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	CLMB	9.270	.100	.058	.006	.000
Robinson R22	IO-320-DIAD	APCH	6.016	.078	.022	.003	.000
Robinson R22	IO-320-DIAD	TGO	35.052	.407	.184	.021	.000
Robinson R22	IO-320-DIAD	APU	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	GSE	.000	.000	.000	.000	.000

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\*\* Denotes User Created Aircraft

## VEHICULAR EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Kimball Avenue	26.957	3.621	3.718	.182	.169
Merrill Avenue	289.790	38.927	39.965	1.955	1.817
Airport total	5.524	.669	.207	.007	.007

## STATIONARY SOURCE EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Airport Jet-A	.000	.030	.000	.000	.000
Airport LL	.000	2.281	.000	.000	.000

# EDMS 4.04 Emissions Inventory Report

Study Name: Chino - Future - with improvements

Airport: CHINO

Report Date: 12/27/02

## SUMMARY

(Tons/Year)

NAME	CO	HC	NOx	SOx	PM10
Aircraft	3,346.272	62.618	13.502	1.330	.000
GSE/AGE/APU	173.328	3.553	9.756	.383	.293
Roadways	316.747	42.548	43.683	2.137	1.986
Parking Lots	5.524	.669	.207	.007	.007
Stationary Sources	.000	2.311	.000	.000	.000
Total	3,841.871	111.699	67.148	3.857	2.286

\* Report includes 1 Aircraft and 0 GSE created by the user.



# AIRCRAFT EMISSIONS

(Tons/Year)

Aircraft	Engine	Mode	CO	HC	NOx	SOx	PM10
**B737-300	DEFAULT	APCH	.082	.002	.230	.014	.000
**B737-300	DEFAULT	CLMB	.032	.000	.002	.000	.000
**B737-300	DEFAULT	TKOF	.008	.000	.192	.005	.000
**B737-300	DEFAULT	TAXI	1.946	.090	.296	.039	.000
**B737-300	DEFAULT	APU	.000	.000	.000	.000	.000
**B737-300	DEFAULT	GSE	.000	.000	.000	.000	.000
500 Citation	JT15D-1A & 1B	TAXI	7.564	2.894	.100	.031	.000
500 Citation	JT15D-1A & 1B	TKOF	.114	.000	.326	.023	.000
500 Citation	JT15D-1A & 1B	CLMB	.148	.000	.286	.023	.000
500 Citation	JT15D-1A & 1B	APCH	2.894	.317	.246	.039	.000
500 Citation	JT15D-1A & 1B	TGO	.107	.013	.027	.003	.000
500 Citation	JT15D-1A & 1B	APU	.000	.000	.000	.000	.000
500 Citation	JT15D-1A & 1B	GSE	34.379	.688	1.680	.061	.051
Aztec	TIO-540-J2B2	TAXI	36.722	1.932	.011	.003	.000
Aztec	TIO-540-J2B2	TKOF	44.907	.385	.011	.003	.000
Aztec	TIO-540-J2B2	CLMB	72.278	.817	.012	.005	.000
Aztec	TIO-540-J2B2	APCH	87.407	.001	.096	.008	.000
Aztec	TIO-540-J2B2	TGO	92.007	.568	.053	.007	.000
Aztec	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Aztec	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Cessna 150	O-200	TAXI	20.045	.902	.049	.003	.000
Cessna 150	O-200	TKOF	35.594	.764	.179	.004	.000
Cessna 150	O-200	CLMB	78.814	1.692	.396	.009	.000
Cessna 150	O-200	APCH	132.085	3.694	.127	.012	.000
Cessna 150	O-200	TGO	136.593	3.411	.389	.014	.000
Cessna 150	O-200	APU	.000	.000	.000	.000	.000
Cessna 150	O-200	GSE	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	TAXI	3.980	.218	.005	.000	.000
Cessna T337	IO-360-B	TKOF	7.422	.062	.012	.001	.000
Cessna T337	IO-360-B	CLMB	8.428	.070	.039	.001	.000

EDMS 4.04 Emissions Inventory



Cessna T337	IO-360-B	APCH	8.813	.124	.130	.001	.000
Cessna T337	IO-360-B	TGO	11.084	.118	.081	.001	.000
Cessna T337	IO-360-B	APU	.000	.000	.000	.000	.000
Cessna T337	IO-360-B	GSE	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	TAXI	171.279	9.013	.052	.014	.000
Cherokee six	TIO-540-J2B2	TKOF	248.400	2.129	.062	.019	.000
Cherokee six	TIO-540-J2B2	CLMB	362.925	4.103	.059	.027	.000
Cherokee six	TIO-540-J2B2	APCH	652.458	.007	.719	.057	.000
Cherokee six	TIO-540-J2B2	TGO	700.610	3.509	.465	.057	.000
Cherokee six	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Cherokee six	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
Gulfstream IV	DEFAULT	APCH	.534	.123	.781	.137	.000
Gulfstream IV	DEFAULT	TAXI	3.557	.502	.369	.148	.000
Gulfstream IV	DEFAULT	CLMB	.056	.021	1.175	.070	.000
Gulfstream IV	DEFAULT	TKOF	.068	.077	2.042	.097	.000
Gulfstream IV	DEFAULT	TGO	.023	.007	.120	.009	.000
Gulfstream IV	DEFAULT	APU	.121	.009	.597	.059	.000
Gulfstream IV	DEFAULT	GSE	.319	.086	.707	.016	.035
Kingair 200	PT6A-41	TAXI	7.820	6.892	.133	.037	.000
Kingair 200	PT6A-41	TKOF	.110	.038	.172	.012	.000
Kingair 200	PT6A-41	CLMB	.193	.060	.224	.016	.000
Kingair 200	PT6A-41	APCH	4.397	2.869	.587	.068	.000
Kingair 200	PT6A-41	TGO	.253	.161	.052	.005	.000
Kingair 200	PT6A-41	APU	.000	.000	.000	.000	.000
Kingair 200	PT6A-41	GSE	51.606	1.032	2.523	.092	.077
Learjet 25C	DEFAULT	TKOF	.112	.000	.017	.002	.000
Learjet 25C	DEFAULT	CLMB	.080	.001	.010	.002	.000
Learjet 25C	DEFAULT	TAXI	1.317	.153	.008	.005	.000
Learjet 25C	DEFAULT	APCH	.683	.000	.012	.004	.000
Learjet 25C	DEFAULT	TGO	1.327	.006	.058	.012	.000
Learjet 25C	DEFAULT	APU	.000	.000	.000	.000	.000
Learjet 25C	DEFAULT	GSE	1.852	.037	.091	.003	.003
Learjet 35/36	DEFAULT	CLMB	.063	.004	.406	.017	.000
Learjet 35/36	DEFAULT	APCH	1.630	.310	.430	.039	.000
Learjet 35/36	DEFAULT	TAXI	3.372	1.153	.162	.031	.000
Learjet 35/36	DEFAULT	TKOF	.061	.005	.670	.024	.000
Learjet 35/36	DEFAULT	TGO	.059	.011	.049	.003	.000
Learjet 35/36	DEFAULT	APU	.000	.000	.000	.000	.000

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Learjet 35/36	DEFAULT	GSE	33.445	.669	1.635	.060	.050
Navajo	TIO-540-J2B2	TAXI	36.722	1.932	.011	.003	.000
Navajo	TIO-540-J2B2	TKOF	44.907	.385	.011	.003	.000
Navajo	TIO-540-J2B2	CLMB	72.278	.817	.012	.005	.000
Navajo	TIO-540-J2B2	APCH	87.407	.001	.096	.008	.000
Navajo	TIO-540-J2B2	TGO	92.007	.568	.053	.007	.000
Navajo	TIO-540-J2B2	APU	.000	.000	.000	.000	.000
Navajo	TIO-540-J2B2	GSE	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	TAXI	7.858	6.926	.134	.037	.000
PA-42 Cheyenne	PT6A-41	TKOF	.122	.042	.191	.013	.000
PA-42 Cheyenne	PT6A-41	CLMB	.142	.044	.165	.012	.000
PA-42 Cheyenne	PT6A-41	APCH	2.949	1.925	.394	.046	.000
PA-42 Cheyenne	PT6A-41	TGO	.176	.112	.040	.004	.000
PA-42 Cheyenne	PT6A-41	APU	.000	.000	.000	.000	.000
PA-42 Cheyenne	PT6A-41	GSE	51.606	1.032	2.523	.092	.077
Robinson R22	IO-320-DIAD	TAXI	.905	.053	.002	.001	.000
Robinson R22	IO-320-DIAD	TKOF	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	CLMB	9.270	.100	.058	.006	.000
Robinson R22	IO-320-DIAD	APCH	6.016	.078	.022	.003	.000
Robinson R22	IO-320-DIAD	TGO	35.052	.407	.184	.021	.000
Robinson R22	IO-320-DIAD	APU	.000	.000	.000	.000	.000
Robinson R22	IO-320-DIAD	GSE	.000	.000	.000	.000	.000

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\*\* Denotes User Created Aircraft

## VEHICULAR EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Kimball Avenue	26.957	3.621	3.718	.182	.169
Merrill Avenue	289.790	38.927	39.965	1.955	1.817
Airport total	5.524	.669	.207	.007	.007

## STATIONARY SOURCE EMISSIONS

(Tons/Year)

Source	CO	HC	NOx	SOx	PM10
Airport Jet-A	.000	.030	.000	.000	.000
Airport LL	.000	2.281	.000	.000	.000



## Attachment D NOISE EXPOSURE ANALYSIS

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## **Attachment D**

### **NOISE EXPOSURE ANALYSIS**

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*Chino Airport*

To determine the noise related impacts that the proposed development could have on the environment surrounding Chino Airport, noise exposure patterns were analyzed for both existing airport activity conditions and projected long term activity conditions.

The basic methodology employed to define aircraft noise levels involves the use of a mathematical model for aircraft noise predication. The Community Noise Exposure Level (CNEL) was used in this study to assess aircraft noise.

CNEL is defined as the average A-weighted sound level as measured in decibels (dB), during a 24-hour period. A 5dB penalty applies to noise events occurring in the evening (7:00 p.m. to 10:00 p.m.), while a 10 dB penalty applies to noise events occurring at night (10:00 p.m. to 7:00 a.m.). CNEL is a summation metric which allows objective analysis and can describe noise exposure comprehensively over a large area. The 65 CNEL contour has been established as the threshold of incompatibility, meaning that noise levels below 65 CNEL are considered compatible with underlying land uses.

Since noise decreases at a constant rate in all directions from a source, points of equal CNEL noise levels are routinely indicated by means of a contour line. The various contour lines are then superimposed on a map of the airport and its environs. It is important to recognize that a line drawn on a map does not imply that a particular noise condition exists on one side of the line and not on the other. CNEL calculations do not precisely define noise impacts. Nevertheless, CNEL contours can be used to: (1) highlight existing or potential incompatibilities between airport and any surrounding development; (2) assess relative exposure levels; (3) assist in the

preparation of airport environs land use plans; and (4) provide guidance in the development of land use control devices, such as zoning ordinances, subdivision regulations and building codes.

The noise contours for Chino Airport have been developed from the Integrated Noise Model (INM), Version 6.0. The INM was developed by the Transportation Systems Center of the U.S. Department of Transportation at Cambridge, Massachusetts, and has been specified by the FAA as one of the two models acceptable for federally funded noise analysis.

The INM is a computer model which accounts for each aircraft along flight tracks during an average 24-hour period. These flight tracks are coupled with separate tables contained in the data base of the INM which relate to noise, distances, and engine thrust for each make and model of aircraft type selected.

Computer input files for the noise analysis assumed implementation of the proposed airfield plan. The input files contain operational data, runway utilization, aircraft flight tracks, and fleet mix as projected in the plan. The operational data and aircraft fleet mix are summarized in **Table A**.

<b>TABLE A</b>		
<b>Aircraft Forecast Summary</b>		
	<b>Annual Operations</b>	
<b>Type of Operation</b>	<b>Existing (2001)</b>	<b>Long Term</b>
<b>Itinerant Operations</b>		
Single-Engine Piston	58,259	96,548
Multi-Engine Piston	15,050	23,735
Turboprop	2,832	6,705
Business Jet	2,427	4,023
Helicopter	<u>2,347</u>	<u>3,084</u>
Total Itinerant Operations	80,915	134,095
<b>Local Operations</b>		
Single-Engine Piston	47,786	53,721
Multi-Engine Piston	9,945	10,831
Turboprop	323	361
Jet	65	72
Helicopter	<u>6,458</u>	<u>7,221</u>
Total Local Operations	64,576	72,205
<b>Total Operations</b>	145,491	206,300

Basic assumptions used as input to the INM are presented in **Tables B and C**. The runway use percentages and day/night split were assumed to remain constant over the planning period.



<b>TABLE B</b> <b>Noise Contour Input Data: Percent Day, Evening, and Night</b>		
<b>Percent Day</b>	<b>Percent Evening</b>	<b>Percent Night</b>
92%	3%	5%

<b>TABLE C</b> <b>Noise Model Input: Runway Use Percentages</b>						
<b>Aircraft</b>	<b>8L</b>	<b>26R</b>	<b>8R</b>	<b>26L</b>	<b>3</b>	<b>21</b>
Single Engine Piston	2.50%	60.00%	2.50%	25.00%	7.50%	2.50%
Multi-Engine Piston	2.50%	60.00%	2.50%	25.00%	7.50%	2.50%
Turboprop	2.50%	60.00%	2.50%	25.00%	7.50%	2.50%
Business Jets	2.50%	40.00%	2.50%	50.00%	2.50%	2.50%

The aircraft noise contours generated using the aforementioned data for Chino Airport are depicted on **Exhibit D1, Existing Noise Exposure** and **Exhibit D2, Long Term Noise Exposure**. As shown on both exhibits, the 65 CNEL noise contour is expected to remain almost entirely within the existing airport property line when considering both existing and forecast activity at the airport. A small portion of the 65 CNEL contour extends beyond the western airport boundary onto land owned by the State of California, which is currently undeveloped. An aviation easement should be secured for the area within the Long Term 65 CNEL contour, to ensure incompatible land uses are not developed in the 65 CNEL contour.







